Nutrition News

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NATURAL FOODS IN GOOD NUTRITION

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The value of different foods in the human dietary is a problem which deserves all the consideration it is receiving at present. There are many fundamental questions involved and we can make accurate decisions about the foods needed only when these questions are thoroughly understood.

A hundred years ago, these questions could have been answered with little difficulty. At that time the idea existed that all foods contained a single universal nutrient. According to this idea, it did not make much difference whether the diet contained milk, eggs, bread, or meat. Fortunately, however, people did not rely upon a single food product. Down through the ages, man has spent considerable effort to obtain a variety of foods.

Scientific Research

During the last war we were just beginning to recognize the existence of vitamins, and certain foods were found to be rich in the two or three vitamins that were familiar to us. This information was "translated" for the general public and the Armed Forces in the recommendation for the use of protective foods.

In the present war, we have a still greater appreciation for the use of natural foods. Through the intervening years, science has added information about the nutrients available in foods and the dietary needs of individuals.

Although we may not have information concerning all of the necessary nutrients—what they are, how much we need, how much is contained in which foods—we do have basic information which demonstrates that if we eat sufficient natural foods to supply the known essentials we probably obtain all necessary factors—known or unknown.

Natural and Fortified Foods

We hear much about vitamin concentrates, fortification of foods, and so on, and many are inclined to sit back with a sense of security because we have so many pure vitamins available. Of course, no one can deny the importance of these synthetic substances in clinical medicine or in certain individual nutrition problems.

The deficiencies in individual diets may be temporarily relieved with tablets, capsules, or concentrates of vitamins but even here we must sooner or later depend upon foods. If we find deficiencies in regional diets, we must turn to natural foods or food fortification of some kind.

A psychological approach plus ready availability of desirable food products are factors which contribute to the motivation and education of lay groups in the consumption of nutritious meals. When specific deficiencies have occurred in definite regions, distinct benefits have resulted from certain fortification programs. The two best known of such programs include iodized salt and vitamin D milk and the success of these two programs was due mainly to the availability of these fortified foods on grocery shelves and in milk wagons.

Fortification programs are sound on the whole; we have to make temporary modifications in times of emergency. However, **these additions must be based upon knowledge of what our natural foods contain.** Fortification should be used only when dietary essentials cannot be obtained easily and economically from ordinary foods.

Doctor Elvehjem

As we have accumulated information about vitamins and other dietary essentials, we realize more and more the importance of natural foods in assuring adequate food intake for all—young and old alike. For example, milk is an economical natural food. When taken in recommended amounts, milk fulfills the daily requirement for calcium and riboflavin and makes important contributions of many other food nutrients.

It is evident that as we learn more about nutrition we realize more and more the nutritional significance of milk, and if we knew the complete composition of milk and the nutritional value of each of the ingredients we would have a fairly complete knowledge of the fundamentals of nutrition.

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Glances AT NUTRITION RESEARCH

The war has accomplished much in popularizing nutrition and in demonstrating the need for more nutrition knowledge—of the nutritive value of foods and of the food habits, nutritional status, and food requirements of the population.

Proteins in Milks—A fundamental consideration in determining the nutritive value of proteins is their content of various amino acids. A recent study shows a marked similarity in the amino acid content of human milk and that of cow's milk. The chief differences are in the cystine and methionine. The totals of these two sulfur-containing amino acids are similar in the two varieties of milk, but in diluted cow's milk the cystine level is lower and the methionine level correspondingly higher than in human milk.

—Am. J. Dis. Child. 63:1004 (May) 1942.

Caloric Intake—In one phase of the Regional Project of the North Central States Relating to the Nutritional Status of College Women, research workers studied the caloric intake. The mean caloric intake of 2038 for several college women, individually and collectively, was well below the commonly used standard of 2500 for moderately active women. Kansas subjects had a significantly higher mean caloric intake than Ohio subjects although the mean caloric intakes of different subjects varied greatly.

—J. Am. Diet. Assn. 18:449 (July) 1942.

Inadequate Diets — Dietary histories were collected for more than 2000 students attending a high school in a low-rent area in New York city. About three-fourths of the students received less than their estimated calorie needs.

Evaluation of the adequacy of the diets for all nutrients other than calories was based on the recommendations of the National Research Council. Diets were least deficient in protein. The greatest deficiency occurred for vitamin A, about 40 per cent of the students having less than two-thirds the recommended amounts. About 30 per cent had less than two-thirds of the calcium and ascorbic acid allowances. Riboflavin was short in 42 per cent of the diets of older boys and in 16 to 18 per cent of all others.

Medical examinations paralleled the findings of dietary deficiencies among these children by revealing high incidence of mild avitaminosis A, ariboflavinosis, and low-plasma ascorbic acid levels.

—Mil. Mem. Fund Quar. 20:61 (Jan.) 1942.

Thiamine in American Diet—In a recent contribution on the thiamine content of the American diet, Robert R. Williams and his co-workers studied the average American diet that was consumed by the middle two-thirds or three-fourths of the population prior to the advent of enriched bread and flour. They conclude that the thiamine intake is about 0.8 mg. per 2500 calories. This is substantially lower than previously supposed from the results of computations such as those of Stiebeling and Phipard. The principal contributors of thiamine to prevailing diets are lean pork, bread, and milk.

—J. Nutrition. 23:613 (June) 1942.

TIMELY TOPICS

DR. ELVEHJEM

Dr. Conrad A. Elvehjem, author of the leading article in this issue, is a nationally known leader in the nutrition research field. Among his important connections are memberships on the Food and Nutrition Board, National Research Council; on the Council on Foods and Nutrition, American Medical Association; and on the Scientific Advisory Committee, Nutrition Foundation. Dr. Elvehjem's research on nicotinic acid led to its use as an important factor in the cure of pellagra.

NUTRITIONISTS

Public health administrators are showing markedly increased appreciation of nutrition service as a public health measure. In their budgets for the fiscal year 1942, 41 states had provided funds to employ 89 nutritionists on their staffs, as compared with 3 that were employed by the states in 1936.

ADVISORY COMMITTEE

An advisory committee representing the food industries has been appointed to assist in guiding the government policies in the National Nutrition Program. On this committee are representatives of: Corn Products Refining Company, National Dairy Council, National Association of Food Chains, National Live Stock and Meat Board, National Canners Association, Northeast Vegetable Growers, Millers National Federation, American Sugar Refineries Committee, and Associated Grocer Manufacturers of America, Inc.

COMMUNITY EFFORT PROMOTES NUTRITION OF INDUSTRIAL WORKERS

By Dr. Joseph H. Howard, Chairman, Health and Nutrition Committee, Civilian Defense Council, Bridgeport, Connecticut

"Pack a Lunch a Man Can Work On" is the catchy slogan which gives the essence of the Bridgeport Plan — a community industrial nutrition program. Back of this slogan is a unique story of unselfish devotion to a community problem and citizen co-operation.

The program has developed from the idea of a local businessman to assist homemakers solve their lunch-packing problems to a community-wide demand for guidance. To put the entire program on a city-wide basis, the Health and Nutrition Committee of the Civilian Defense Council early became the community sponsor.

Among the booklets and leaflets distributed during the program is one key piece which presents the "Five Star Plan"—a measuring rod for scoring a nutritious packed lunch.

To meet the requirements of a "Five-Star Lunch": (1) Plan the lunch the day before. Buy or cook enough food for your dinner so there'll be some left over for the lunch box. (2) Have all food and equipment conveniently stored in one place so the lunch can be packed quickly in the morning. (3) Wrap all foods in wax paper; pack puddings and salads in paper containers with lids and include paper "hot drink" cups for hot dishes. (4) Put into the lunch every day: milk, in food or drink; bread, whole wheat or enriched; meat or cheese or eggs or fish; fruit; vegetables, at least one, in sandwich fillings, salads, or in hearty main dishes. (5) Clean and air the lunch box and vacuum bottle every night.

Community Co-operation

Instructors in lunch box packing technique, trained by the Red Cross, go out into the community—to churches, schools, clubs, and homes—to carry the message of pep-packed meals for war workers.

Each week the Bridgeport Post names a "Kitchen Soldier" — an outstanding homemaker in the city who packs one or more lunches for war workers in her family. The Post prints her favorite menus, recipes, and lunch box tips. With the aid of trained nutritionists she tells her readers how, often with only minor additions or subtractions, they may provide their families with nutritious healthgiving meals, without too radical a change in eating habits.

Milk, and its importance in the lunch box, is emphasized in many ways. Women are learning methods of including milk in the meal eaten on the job, in addition to serving it as a beverage. They are taught that custards and puddings, made with a milk base, are easily packed in the lunch box.

Members of the Volunteer Registration Bureau interviewed over a thousand homemakers to gather facts on lunch box packing habits that might form the basis for emphasis on particular points in this nutrition program.

One of the latest developments is the participation of the city's two leading department stores. They feature nutrition information booths, window displays, radio programs, and weekly demonstration lectures.

To insure continuance of the program as a permanent community responsibility, an advisory committee has been organized.

Through the co-operation of the Health Department, the Bridgeport Plan is being expanded to include the improvement of conditions in public eating places around war plants.

With the lunch-packing program in full swing, improvements under way in industrial cafeterias, and the aid of restaurant owners enlisted in a drive organized to improve food selection and preparation in the smaller restaurants, the future has bright prospects. The day seems not too far distant that whenever a worker eats a meal or a part of a meal, he will have access to foods designed to keep him in top condition—happy and healthy, prepared to do a real job in helping win the war on the production front!

IOWA CO-ORDINATES ITS NUTRITION PROGRAM

By Mrs. Ruth Seaton Hicks, Extension Nutrition Specialist, Iowa State College

Wartime, demanding increased efficiency in all fields, brings a direct challenge to the county nutrition committee to co-ordinate all nutrition efforts under one organization to avoid confusion, overlapping of activities, and waste motion.

In Iowa, every effort is being made to do this. When the first state-wide meeting was held in September of 1940, every organized group in the state was invited to send representatives. The county groups attending the state meeting were urged to incorporate into the county nutrition committee representatives of all organized civic clubs and professional groups.

This makes it possible for the county committee to observe the needs of the county or of individual cities in the county and plan a nutrition program to meet those needs. Each organization knows, through its representative on the nutrition committee, just what is being done and planned, what material is available should any group desire a program for its own use, and who might be available to give nutrition help. This means, too, that all groups look to the nutrition committee as an authentic source of nutrition information.

To guide this co-ordination in unorganized counties, an extension nutrition specialist is loaned as a field worker to the state nutrition committee. Her "job" is to approach leaders of various organizations, personally, to explain the purpose and possibilities of the county nutrition committee.

The county extension agent, the superintendent of schools, the social welfare director, home economics teachers, and civilian defense director are among the first interviewed. Often home economics trained women in the county not engaged in professional work are actively interested in a nutrition pro-

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DID YOU KNOW ?

—that a dehydrating process being developed by the Department of Agriculture will convert cheese to a flour-like form which when mixed with water will resemble processed cheese?

—that the average American soldier now weighs 152 pounds, while during the Civil War he weighed only 136 pounds?

—that improved glass-making methods have produced milk bottles weighing one-fourth less than the old-fashioned bottle and averaging 45 per cent more round trips?

—that as the war is creating a shortage of fish liver oils, livestock farmers and poultrymen are depending more and more upon alfalfa meal, kale, yellow corn, and carrots for needed vitamin A?

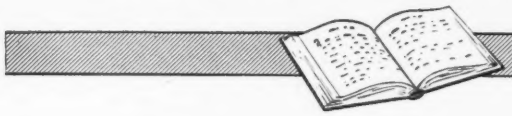
—that George Washington's expense ledger shows his interest in ice cream, then a new dessert? In it is found "a record of purchase for cream and a machine for ice, under date of May 17, 1784."

—that fish never drink water—they rely on their food for moisture?

—that a tin of butter issued as rations to an uncle during the Spanish-American War, is still in possession of a Chicago family?

—that you usually have to drink two cups of tomato juice to get as much vitamin C as you get from one cup of orange juice?

THINGS YOU'LL LIKE TO READ



VOLUNTEERS IN NUTRITION — U. S. Office of Civilian Defense, Washington, D. C. Free.

This brief manual is for the use of executives in civilian defense activities who are using volunteers in nutrition programs, and is designed to guide them in co-ordinating volunteer effort.

1942 publications of United States Government Bureaus available from the Superintendent of Documents, Washington, D. C.

THE ROAD TO GOOD NUTRITION —Lydia J. Roberts. 15 cents.

3 MARKET LISTS FOR LOW-COST MEALS—$1.25 per hundred.

MARKET LISTS FOR MODERATE-COST AND LIBERAL MEALS—$1.25 per hundred.

FAMILY NUTRITION — Philadelphia Child Health Society, 311 South Juniper Street, 1942. Free.

Of particular value to teachers of nutrition courses, this authoritative, compact bulletin gives results of tests on nutritional status of human beings, dietary values of common foods, nutritional needs of people, and specific diet and budget suggestions.

U. S. ARSENAL FOR FOOD—Council for Democracy, 11 West 42nd Street, New York, 1942. 10 cents.

This concise booklet presents the food picture of the nation today, giving concrete information about what is needed and the difficulties this country must face—concluding with a challenge to each person.

IOWA CO-ORDINATES ITS NUTRITION PROGRAM

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gram. In some cases the field worker assists in an organization meeting following the individual conferences in the county.

This effort toward co-ordination of all agencies has resulted in the development of a plan by the schools for co-operation in the county nutrition programs throughout the state.

The state vocational home economics supervisors, the rural schools supervisor, the chairman of the state nutrition committee, the state home demonstration agent leader, and the nutrition committee field worker conferred in June. A plan was developed whereby the schools would place emphasis on the same nutrition program stressed in the state nutrition program.

The five phases of nutrition thought to be particularly pertinent for wartime needs are:

1. Balanced diet centered around the noon lunch for school children.
2. Care and use of milk.
3. Use of meat, cheese, eggs, and other meat substitutes.
4. Use of enriched flour and whole-grain cereals.
5. Use of less sugar.

At a three-weeks workshop at Iowa State College, vocational homemaking teachers planned nutrition lessons for high school home economics teachers and for every grade level of town and rural schools that will incorporate this state nutrition program.

In each county in Iowa, a permanent curriculum chairman — a vocational homemaking teacher — consults with all home economics teachers in the county concerning problems in their field. Another vocational teacher has been named nutrition consultant for grade and rural teachers in each county. At meetings of the rural and grade teachers held before school opened, this nutrition consultant presented the nutrition lesson plan prepared in the workshop.

The school nutrition consultants in each county are members of the nutrition committee. In this way, the schools give added emphasis to the program carried by the county nutrition committee. Through knowledge of plans of other groups—such as the extension program—they can augment work already accomplished.

Acting in an advisory capacity on the county nutrition committee, with other home economists, these school nutrition advisors add to the amount of professional advice of trained peopl from which the committee may benefi